

	Gas on Gas	Air on Air	Gas on Waste Gas	Air on Waste Gas
-y=frictional resistance in 0.016X2.174X6.60X0.208 0 016X1 947X6 39X0 239 0.016X2.174X8 19X0 192 0 016X1 947X7 23X0 192	0 kg			
7 may be considered as		0 kg		
$\frac{m^2}{s}$ or as mm of water			0 kg	
The pressure required to air and gas velocity above				0 kg
5 = $(vf \sim s-20) A_j$ kg per $m^2 \dots$	0 kg	0 kg	0 kg	0 kg

The height from the bottom of the checker chambers to the port sill or bridge of the furnace can now be fixed from dimensions that have been determined. This permits the approximation of the chimney effect of the checkers and uptakes. The height will be found as follows:

Flues below checker chamber	1 m	3 280
Checkerwork height	7m 000	22.963
Checker to arch at center	1 600	5 240
From bottom of arch to port sill	9 m600 3m 000	31.492f t
H — total height to port sill	12 m	41.336

Chimney Effect of Checkers and "Uptakes	Gas on Gas	Air on Air	Gas on Waste Gas	Air on Waste Gas
$5 \wedge \wedge (A_{air} - A_{gas} t^\circ)$				
$f^\circ = \text{average}$	850°	750°	1200°	1100°
$1 \wedge \wedge (vt = \text{gas factor})$	4 1105	3 7525	5 4040	5 0370
A_o = specific weight of gases	1.125 0.273	1.293 0 345	1.32 0 244	1.32 0 262
$A_{air} = \text{specific weight of air ..}$	1 293			
$A_{air} - A_{gas} = \text{kg per } m^3$	1 020	0 848	1 040	1 031
$5_1 = 12.60 \times 1.02$	12 kg			
$5_2 = 12.60 \times 0.848 = \text{kg per}$		10 kg		
$5_3 = 12.60 \times 1.049 = \text{kg per}$			13 kg	
$5_4 = 12.60 \times 1.031 = \text{kg}$				12 kg